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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,647	08/17/2001	Douglas Anthony Able	2001-0099.01	4582

21972 7590 10/20/2005

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EXAMINER	
POON, KING Y	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/932,647	ABLE ET AL.	
	Examiner	Art Unit	
	King Y. Poon	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3 and 5-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3 and 5-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment to the specification has not been entered because the original specification is not presented in paragraph format "[####]". The examiner cannot follow the applicant of which paragraph of the original specification is being amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 3, 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) in view of Nagasaka (5,241,349).

Regarding claim 5: Smith teaches a method of controlling a printer (column 2, line 50) having a ready status (print mode, column 1, lines 25-30) and an on-but-not ready status (idle mode, column 1, lines 35-40) and including a mirror having an operating speed (column 1, lines 45-50) comprising: starting a time for a predetermined time interval (period of time, column 1, lines 35-40) when a predetermined control signal is entered into the printer wherein said printer is in said ready status (print mode, column 1, lines 25-30, column 3, lines 25-35) and said mirror is at said operating speed and executing one of the following: continue the printer in the ready status when the time does not reach the predetermined time interval (column 1, lines 34-38).

It is inherent that a computer/processor uses timer to count a predetermined period of time and requires a signal to start the timer.

Nagasaka shows a ready timer (S3 fig. 5) to count a predetermined period of time (S5, fig. 5) that the system is in ready state and a timer start signal (S4, fig. 5).

Therefore, it would have been obvious that Smith has a ready timer and a timer start signal such that Smith system would be able to function.

Note: the predetermined control signal when interprets broadly, would be the timer start signal or the predetermined signal that indicates there will be more printing coming or not, column 4, lines 10-32, column 2, lines 20-31).

Regarding claim 3: Smith et al. teach the method as in claim 1 and further teach a printer receiving scanner-dependent input as the predetermined signal (column 3, lines 1-6). Note that said signal defining said predetermined time based in the time between said scanned pages, although not mentioned specifically by Smith et al., is essential if the input from the scanner is to function without the printer going into idle mode before the scanner is finished sending input into the printer. The timing between scanned pages is inherently accounted for in the timing for going into idle mode, otherwise the printer may go into idle mode before the scanner can send another page. Therefore, said signal defining said predetermined time based in the time between said scanned pages is inherent to the teachings of Smith et al.

Regarding claims 6: Smith teaches wherein the ready timer is started upon the completion of any print page (column 3,lines 25-35, when the printing is completed, the printer is inactive).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Nagasaka (5,241,349) as applied to claim 5 and further in view of Muto (US 5,521,686).

Regarding claim 7: Smith does not teach resetting the ready timer, although it is well known in the art the timer is reset in order to be reused.

Muto teaches it is well known in the art to reset a timer such that the timer could be used to count time again (column 8, lines 10-20).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to reset the ready timer such that the ready timer can be reused again.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Nagasaka (5,241,349) as applied to claim 5 and further in view of Jordon (US 6,078,343).

Regarding claim 8: Smith teaches the control signal is entered into the printer when print data is delivered to a control unit in the printer (column 3, lines 22-35, column 4, lines 1-33).

Smith does not teach the control unit is part of a print engine.

Jordan, in the same area of printer, teaches the control unit is within the print engine (fig. 1, column 3, lines 20-21).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include the control unit in the print engine.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Jordon because it would allowed Smith's invention to be applied to printer that includes the controller in the print engine.

6. Claims 9-11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) in view of Hibino (US 5,636,332).

Regarding claims 9, 13: Smith teaches a system (fig. 1) for controlling a printer (column 2,line 50) having a ready status (print mode, column 1, lines 25-30) and an on-but-not ready status (idle mode, column 1, lines 35-40) comprising: a printer including a time to be counted (period of time, column 1, lines 35-40), a mirror (column 1,lines 29-30) having an operating speed and an automatic control apparatus (column 3, lines 22-25) and input unit for inputting a predetermined control signal into said printer; wherein said automatic control apparatus is configured to: start counting a predetermined time interval when said predetermined control signal is entered into said printer wherein said printer is in said ready status (print mode, column 1, lines 25-30, column 3, lines 25-35) and said mirror is at said operating speed and executing one of the following: continue the printer in the ready status when the time does not reach the predetermined time interval (column 1, lines 34-38).

It is inherent that a computer/processor uses timer to count a predetermined period of time and requires a signal to start the timer.

Hibino shows a ready timer (column 5, lines 10-15) to count a predetermined period of time (S5, fig. 5) that the system is in ready state.

Therefore, it would have been obvious that Smith has a ready timer and a timer start signal such that Smith system would be able to function.

Smith does not teach an input capable of entering a predetermined time interval.

Hibino teaches an input to enter the predetermined time interval (column 5, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include an input capable of entering a predetermined time interval.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Hibino because it would have allowed the predetermined time to be adjusted to suit the user/operator's needs as taught by Hibino at column 5, lines 1-10.

Note: the predetermined control signal when interprets broadly, would be the timer start signal or the predetermined signal that indicates there will be more printing coming or not, column 4, lines 10-32, column 2, lines 20-31).

Regarding claims 10, 14: Smith teaches wherein the ready timer is started upon the completion of any print page (column 3,lines 25-35, when the printing is completed, the printer is inactive).

Regarding claims 11, 15: Smith et al. teach the method as in claim 9 and further teach a printer receiving scanner-dependent input as the predetermined signal (column 3, lines 1-6). Note that said signal defining said predetermined time based in the time between said scanned pages, although not mentioned specifically by Smith et al., is essential if the input from the scanner is to function without the printer going into idle mode before the scanner is finished sending input into the printer. The timing between scanned pages is inherently accounted for in the timing for going into idle mode, otherwise the printer may go into idle mode before the scanner can send another page. Therefore, said signal defining said predetermined time based in the time between said scanned pages is inherent to the teachings of Smith et al.

7. Claims 12, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Hibino as applied to claims 9, 13 and further in view of Jordon (US 6,078,343).

Regarding claims 12, 16: Smith teaches the control signal is entered into the printer when print data is delivered to a control unit in the printer (column 3, lines 22-35, column 4, lines 1-33).

Smith does not teach the control unit is part of a print engine.

Jordan, in the same area of printer, teaches the control unit is within the print engine (fig. 1, column 3, lines 20-21).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include the control unit in the print engine.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Jordon because it would allowed Smith's invention to be applied to printer that includes the controller in the print engine.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Hibino as applied to claim 13 and further in view of Nagasaka (US 5,241,349).

Regarding claim 17: Smith does not teach the control unit is a microprocessor.

Nagasaka, in the same area of controlling printing apparatus teaches using a microprocessor as a control unit.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include: using a microprocessor as the control unit.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Nagasaka because a microprocessor is small, cheap and widely available.

Response to Arguments

9. Applicant's arguments filed 7/29/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Smith's reference does not teach to maintain the printer in a print mode for some additional time has been considered.

In reply: Column 2, lines 25-31, of Smith clearly teaches the print mode time is extended before moving to idle mode.

With respect to applicant's argument that Smith does not teach: any useful information can be derived when identifying a predetermined time interval and using such interval to control a printer wherein such predetermined time interval is less than the amount of time necessary for the mirror to slow from operating speed to a stop and then return to said operating speed.

In reply: The claim is claiming: executing one of the following: (i) continue the printer in the ready status when the time does not reach the predetermined time interval, (ii) changing said printer to said on-but-not-ready status when said timer reaches said predetermined time interval, wherein said predetermined time interval is less than the amount of time necessary for the mirror to slow from said operating speed to a stop and then return to said operating speed. As long as Smith teaches any one of the above (i) or (ii) step, Smith reference meet the claimed limitations.

Smith clearly teaches continue the printer in the ready status when the time does not reach the predetermined time interval (column 1, lines 34-38).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 14, 2005

KING Y. POON
PRIMARY EXAMINER